Message from the Guest Editor

Dear Colleagues,

This Special Issue, “Engineering Aptamers for Biomedical Applications”, will mainly focus on the more recent advances in the development of highly stable and specific aptamers suitable as therapeutic and diagnostic agents.

The introduction of modifications in the nucleic acids backbone, the expansion of genetic variability in nucleobases and the generation of enzymes able to catalyze the synthesis of modified aptamers is revealing as invaluable advantage in the design of aptamer ligands in biomedicine. Aptamers obtained with nucleic acid variants exhibit high stability in circulating fluids, target binding affinity and specificity thus potentially improving their applicability as therapeutics and/or as diagnostic tools.

We cordially invite authors in the field to submit original research or review articles pertaining to this important and fast-progressing field of biomedicine.